

REMARKS

Applicants respectfully request further examination and reconsideration in view of the arguments set forth fully below. Claims 1-11, 13-20 and 22-24 were previously pending in this Application. Within the Office Action, Claims 1-11, 13-20 and 22-24 have been rejected. By the above amendments, Claims 1, 7-9, 20, 23, and 24 have been amended, and Claims 3 and 14 have been canceled. Accordingly, Claims 1, 2, 4-11, 13, 15-20, and 22-24 are currently pending in the application.

Rejections Under 35 U.S.C. § 103

Within the Office Action, Claims 1-11, 13-20 and 22-24 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publ. No. 2003/0204612 to Warren (hereinafter Warren) in view of U.S. Patent No. 5,623,695 to Lozinski (hereinafter Lozinski). Applicants respectfully disagree.

Warren teaches a system and method for facilitating device communication, management and control in a network. The apparatus of Warren includes a command translator operable to receive the command and generate at least one device command corresponding to the command. [Warren, Abstract] Warren also teaches that the apparatus includes a plurality of protocol converters each operable to receive at least one device command, translate the at least one device command from a first protocol to a second protocol, and communicate the at least one device command to one or more network elements. [Warren, Abstract] Warren does not teach translating a command formatted in a protocol into a translated command formatted in a *common* application programming interface. As is recognized within the Office Action, Warren does not teach translating a command formatted in a protocol into a translated command formatted in a *common* application programming interface, wherein the common application programming interface is a single application programming interface that is configured to be used by a plurality of applications.

Warren teaches that an abstraction device 106 may allow a manager 102 to communicate and exchange information with a network element 108 when manager 102 and network element 108 use different communication protocols. [Warren, ¶ 0020] Warren further teaches that in a particular embodiment, the manager 102 communicates using a web services protocol, and abstraction device 106 translates between the web services protocol and the protocols used by network elements 108, which allows the manager 102 to communicate with different network elements 108 using a common protocol. [Warren, ¶ 0020] However, this common protocol referred to within the teachings of Warren is specifically related to the manager 102 and not

formatted in a *common* application programming interface, as claimed within the presently pending claims. As described above, Warren does not teach translating a command formatted in a protocol into a translated command formatted in a *common* application programming interface, wherein the common application programming interface is a single application programming interface that is configured to be used by a plurality of applications.

Furthermore, Warren does not teach searching for the device from a plurality of devices based on a content type. Within the Office Action, Warren, Paragraph 65 is cited as teaching a device identifier and “[o]ther and/or additional information may be included in identification information...” Warren clearly does not teach searching for the device from a plurality of devices based on a content type. More is being read into Warren than what is actually taught.

Additionally, Warren does not teach identifying a plurality of protocol translator modules wherein each protocol translator module is associated with a unique protocol. Warren also does not teach storing a list representing the plurality of protocol translator modules. Within the Office Action, Warren, Paragraph 52 is cited as teaching that, “[d]atabase 236 may include any hardware, software, firmware or combination thereof suitable to store and facilitate retrieval information. Database 236 may store any suitable information used by abstraction device 206 to perform command translation or other functions. Database 236 may also store device type information 256. Device type information 256 may, for example, identify each device type in system 100, the communications protocol used by each of the device types, and any other suitable information about the device types.” Again, more is being read into Warren than what it actually teaches. There is no teaching of identifying a plurality of protocol translator modules wherein each protocol translator module is associated with a unique protocol or storing a list representing the plurality of protocol translator modules.

Lozinski teaches a data processing system in which an application program can communicate with two or more system facilities via a programming interface common to the facilities. [Lozinski, Abstract] However, Lozinski does not teach searching for a device based on a content type. Lozinski also does not teach identifying a plurality of protocol translator modules wherein each protocol translator module is associated with a unique protocol or storing a list representing the plurality of protocol translator modules.

In contrast to the teachings of Warren, Lozinski and their combination, the methods and apparatuses of the present invention include translating commands formatted in different protocols into a common application programming interface. Network translator modules act as translators between a plurality of network protocols and a single, common application programming interface (API) for network communication. Each unique translator module translates between the common API and a corresponding unique network protocol. As described above, Warren does not teach translating a command formatted in a protocol into a translated command formatted in a *common* application programming interface. As also described above, Warren does not teach translating a command formatted in a protocol into a translated command formatted in a *common* application programming interface, wherein the common application programming interface is a single application programming interface that is configured to be used by a plurality of applications. Furthermore, Warren, Lozinski and their combination do not teach searching for the device from a plurality of devices based on a content type. Warren, Lozinski and their combination also do not teach identifying a plurality of protocol translator modules wherein each protocol translator module is associated with a unique protocol or storing a list representing the plurality of protocol translator modules.

The independent Claim 1 is directed to a method comprising searching for at least one device based on a content type, detecting the at least one device, detecting a protocol associated with each device, matching the detected protocol with a protocol translator module and using the protocol translator module to translate a command formatted in the protocol into a translated command formatted in a common application programming interface, wherein the common application programming interface is a single application programming interface that is configured to be used by a plurality of applications. As described above, Warren, Lozinski and their combination do not teach searching for at least one device based on a content type. For at least these reasons, the independent Claim 1 is allowable over the teachings of Warren, Lozinski and their combination.

Claim 3 has been canceled by the above amendment. Claims 2 and 4-6 are all dependent on the independent Claim 1. As described above, the independent Claim 1 is allowable over the teachings of Warren, Lozinski and their combination. Accordingly, Claims 2 and 4-6 are all also allowable as being dependent on an allowable base claim.

Additionally, the dependent Claim 5 is directed to searching for the device from a plurality of devices based on a device's availability. Within the Office Action, Warren, Paragraph 65 is cited as teaching a device identifier and "[o]ther and/or additional information may be included in identification information..." Warren clearly does not teach searching for the

device from a plurality of devices based on a device's availability. More is being read into Warren than what is actually taught. For at least these additional reasons, the dependent Claim 5 is allowable over the teachings of Warren, Lozinski and their combination.

Also, the dependent Claim 6 is directed to searching for the protocol translator module. Within the Office Action, Warren, Paragraph 70 is cited as teaching "Abstraction device 206 identifies the communications protocol used by the identified network element 108 at step 406. This may include, for example, command translator 234 using device information 254 and/or device type information 256 in database 236 to identify the communications protocol." However, the cited section still does not teach *searching* for the protocol translator module. For at least these additional reasons, the dependent Claim 6 is allowable over the teachings of Warren, Lozinski and their combination.

The independent Claim 7 is directed to a system comprising means for searching for at least one device based on a content type, means for detecting the at least one device, means for detecting a protocol associated with each device, means for matching the detected protocol with a protocol translator module and means for using the protocol translator module to translate a command formatted in the protocol into a translated command formatted in a common application programming interface, wherein the common application programming interface is a single application programming interface that is configured to be used by a plurality of applications. As described above, Warren, Lozinski and their combination do not teach means for searching for at least one device based on a content type. For at least these reasons, the independent Claim 7 is allowable over the teachings of Warren, Lozinski and their combination.

The independent Claim 8 is directed to a method comprising searching for at least one service based on a content type, detecting the at least one service, detecting a protocol associated with each service, matching the detected protocol with a protocol translator module and using the protocol translator module to translate a command formatted in the protocol into a translated command formatted in a common application programming interface, wherein the common application programming interface is a single application programming interface that is configured to be used by a plurality of applications. As described above, Warren, Lozinski and their combination do not teach searching for at least one service based on a content type. For at least these reasons, the independent Claim 8 is allowable over the teachings of Warren, Lozinski and their combination.

The independent Claim 9 is directed to a method comprising searching for a specific device from a plurality of devices based on a content type, detecting the plurality of devices wherein each unique device communicates using a corresponding protocol, displaying an

indication of each device if a protocol translator module is matched with the corresponding protocol and translating a command formatted in the corresponding protocol into a translated command formatted in a common application programming interface through the protocol translator module, wherein the common application programming interface is a single application programming interface that is configured to be used by a plurality of applications. As described above, Warren, Lozinski and their combination do not teach searching for a specific device from a plurality of devices based on a content type. For at least these reasons, the independent Claim 9 is allowable over the teachings of Warren, Lozinski and their combination.

Claim 14 has been canceled by the above amendment. Claims 10, 11, 13, 15 and 16 are all dependent on the independent Claim 9. As described above, the independent Claim 9 is allowable over the teachings of Warren, Lozinski and their combination. Accordingly, Claims 10, 11, 13, 15 and 16 are all also allowable as being dependent on an allowable base claim.

Additionally, the dependent Claim 16 is directed to searching for the device from a plurality of devices based on a device's availability. Within the Office Action, Warren, Paragraph 65 is cited as teaching a device identifier and "[o]ther and/or additional information may be included in identification information..." Warren clearly does not teach searching for the device from a plurality of devices based on a device's availability. More is being read into Warren than what is actually taught. For at least these additional reasons, the dependent Claim 16 is allowable over the teachings of Warren, Lozinski and their combination.

The independent Claim 17 is directed to a method comprising identifying a plurality of protocol translator modules wherein each protocol translator module is associated with a unique protocol, storing a list representing the plurality of protocol translator modules, displaying an indication of each device having a device protocol that is compatible with one of the plurality of protocol translator modules in the list and translating a command formatted in the device protocol into a translated command formatted in a common application programming interface through one of the plurality of protocol translator modules, wherein the common application programming interface is a single application programming interface that is configured to be used by a plurality of applications. As described above, Warren, Lozinski and their combination do not teach identifying a plurality of protocol translator modules wherein each protocol translator module is associated with a unique protocol or storing a list representing the plurality of protocol translator modules. For at least these reasons, the independent Claim 17 is allowable over the teachings of Warren, Lozinski and their combination.

Claims 18 and 19 are both dependent on the independent Claim 17. As described above, the independent Claim 17 is allowable over the teachings of Warren, Lozinski and their

combination. Accordingly, Claims 18 and 19 are both also allowable as being dependent on an allowable base claim.

The independent Claim 20 is directed to a system comprising a plurality of applications configured for operating through a single, common application programming interface, a first device configured for operating using a first protocol, a second device configured for operating using a second protocol and a protocol translation layer configured for searching for a first protocol translation module corresponding to the first protocol and for searching for a second protocol translation module corresponding to the second protocol, the first protocol translation module and second protocol translation module stored in a list representing a plurality of protocol translator modules, wherein the protocol translation layer is configured to translate a first command formatted in the first protocol into a command formatted in the single, common application programming interface for use by one of the plurality of applications and to translate a second command formatted in the second protocol into a command formatted in the single, common application programming interface for use by another one of the plurality of applications. As described above, Warren, Lozinski and their combination do not teach the first protocol translation module and second protocol translation module stored in a list representing a plurality of protocol translator modules. For at least these reasons, the independent Claim 20 is allowable over the teachings of Warren, Lozinski and their combination.

Claim 21 has been canceled by the above amendment. Claim 22 is dependent on the independent Claim 20. As described above, the independent Claim 20 is allowable over the teachings of Warren, Lozinski and their combination. Accordingly, Claim 22 is also allowable as being dependent on an allowable base claim.

The independent Claim 23 is directed to a network protocol translation system comprising a processor that executes a plurality of run time processes that use only a single application programming interface for network communication, wherein the processor enables at least one of the run time processes to communicate via a first network protocol by executing a first translation module that translates between the first network protocol and the single application programming interface and wherein the processor enables the at least one of the run time processes to communicate via a second network protocol, different from the first network protocol, by executing a second translation module that translates between the second network protocol and the application programming interface, further wherein the first translation module and second translation module are stored in a list representing a plurality of protocol translator modules. As described above, Warren, Lozinski and their combination do not teach wherein the first translation module and second translation module are stored in a list representing a plurality

of protocol translator modules. For at least these reasons, the independent Claim 23 is allowable over the teachings of Warren, Lozinski and their combination.

The independent Claim 24 is directed to a method, executed on a computing platform, comprising the acts of executing a plurality of run time processes that uses only a single application programming interface for network communication, enabling at least one of the run time processes to communicate via a first network protocol by executing a first translation module that translates between the first network protocol and the single application programming interface and enabling the at least one of the run time processes to communicate via a second network protocol, different from the first network protocol, by executing a second translation module that translates between the second network protocol and the single application programming interface, wherein the first translation module and second translation module are stored in a list representing a plurality of protocol translator modules. As described above, Warren, Lozinski and their combination do not teach wherein the first translation module and second translation module are stored in a list representing a plurality of protocol translator modules. For at least these reasons, the independent Claim 24 is allowable over the teachings of Warren, Lozinski and their combination.

For the reasons given above, the Applicant respectfully submits that pending Claims are all in condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, he is encouraged to call the undersigned at (408) 530-9700 to discuss them so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,
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